

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO. IL 60604-3590

## JUN 0 4 2018

REPLY TO THE ATTENTION OF:

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Anthony Falbo Fortistar Methane Group 5087 Junction Road Lockport, New York 14094

Re:

Finding of Violation Arbor Hills Energy LLC Northville, Michigan

Dear Mr. Falbo:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Arbor Hills Energy LLC (Arbor Hills Energy or you), a subsidiary of Fortistar Methane Group LLC under Section 113(a) of the Clean Air Act, 42 U.S.C. § 7413(a). We find that you are violating the Clean Air Act and its implementing regulations at your Northville, Michigan facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contacts in this matter are Kenneth Ruffatto and Vicky Mei. You may call him or her at (312) 886-7886 and (312) 353-2054, respectively, to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Edward Nam

Director

Air and Radiation Division

Enclosure

cc: Diane Kavanaugh Vetort, MDEQ, Senior Environmental Quality Analyst

Scott Miller, MDEQ, Jackson District Supervisor

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:	)
Arbor Hills Landfill	) ) FINDING OF VIOLATION
Northville, Michigan	)
, ,	) EPA-5-18-MI-06
Proceedings Pursuant to	,
the Clean Air Act,	)
42 U.S.C. §§ 7401 et seq.	)
•	)

## **FINDING OF VIOLATION**

The U.S. Environmental Protection Agency finds that Arbor Hills Energy LLC (Arbor Hills Energy) is violating the Clean Air Act. Specifically, Arbor Hills Energy is violating its renewable operating permit (ROP) as follows:

## **Regulatory Authority**

- 1. Title V of the CAA, 42 U.S.C. §§ 7661-7661f, establishes an operating permit program for sources of air pollution. Section 502(d) of the CAA, 42 U.S.C. § 7661a(d), provides that each state must submit to EPA an operating permit program meeting the requirements of Title V.
- 2. In accordance with Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), EPA promulgated regulations implementing Title V of the CAA. *See* 57 Fed. Reg. 32295 (July 21, 1992). Those regulations are codified at 40 C.F.R. Part 70.
- 3. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b) provided that after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate except in compliance with a Title V operating permit.
- 4. EPA gave interim approval of the Michigan Title V permit program on January 10, 1997. See 62 Fed. Reg. 1387 (effective on February 10, 1997). EPA granted source category interim approval of Michigan's Title V program on June 18, 1997. See 62 Fed. Reg. 34010 (effective on July 19, 1997). EPA fully approved the Michigan Title V program on December 4, 2001. See Fed. Reg. 62949 (effective on November 30, 2001).
- 5. The Michigan regulations governing the Title V permit program, also known as the "Renewable Operating Permit Program," are codified at R 336.1210 R 336.1219.

- 6. The Michigan Department of Environmental Quality ("MDEQ") issued a Renewable Operating permit (MI-ROP-N2688-2011) to Veolia-Arbor Hills Landfill, now Advanced Disposal-Arbor Hills Landfill, on January 24, 2011 (the ROP).
- 7. The ROP requires Arbor Hills Energy to comply with the applicable NSPS and NESHAP requirements as well as specific emission limits.

#### Findings and Violations

- 8. Arbor Hills Energy owns and operates a landfill gas-to-energy (LFGTE) facility servicing Arbor Hills Landfill (Arbor Hills, or the Landfill) located at 1611 West Five Mile Road, Northville, Michigan.
- 9. Advanced Disposal Services (Advanced Disposal) owns and operates the Landfill and associated gas collection and control system (GCCS).
- 10. The LFGTE facility has three (3) European Gas Turbines (EGTs) rated at 58.89 MMBtu/hr that were first operated on June 12, 1996 and one (1) Solar Taurus turbine rated at 68 MMBtu/hr that was first operated in December 2005.
- 11. On May 4, 2016, EPA conducted an inspection of the LFGTE facility.
- On June 1, 2016, EPA issued an information request to Arbor Hills Energy under Section 114(a) of the CAA, 42 U.S.C. § 7414.
- 13. On July 6, 2016, Arbor Hills Energy submitted information to EPA in response to the June 1, 2016 Section 114(a) Information Request.
- 14. On September 29, 2016, EPA issued a finding of violation (FOV) alleging violations of the NSPS and NESHAP general provisions as well as Arbor Hills Energy's ROP.
- On March 9, 2018, EPA issued a second information request to Arbor Hills Energy under Section 114(a) of the CAA, 42 U.S.C. § 7414.
- 16. On March 27, 2018, EPA received a response to the March 9, 2018 Section 114(a) Information Request from Arbor Hills Energy.

#### Failure to Comply with Sulfur Dioxide Emission Limit for Turbines and Duct Burners

- 17. The ROP sets hourly and annual sulfur dioxide emission limits for the three EGT turbines as follows:
  - a. hourly limit of 2.9 lbs/hr; and
  - b. annual limit of 12.5 tpy, based on a rolling, 12-month average.

18. Table 1, below, shows the hourly average sulfur dioxide mass emissions reported by Arbor Hills Energy, in pounds per hour, for each of these turbines for the period July 2016 through February 2018.

Table 1: Hourly Average Sulfur Dioxide Emissions for Turbines

Month	EUTURBINE 1-S3 Mass Emissions (lb/hr)	EUTURBINE 3-S3 Mass Emissions (lb/hr)
Jul-16	4.1	4.6
Aug-16	4.1	4.5
Sep-16	4.0	4.5
Oct-16	4.0	4.5
Nov-16	4.1	4.5
Dec-16	4.0	4.4
Jan-17	4.6	5.1
Feb-17	4.6	5.0
Mar-17	4.5	5.0
Apr-17	4.5	5.0
May-17	4.5	5.0
Jun-17	4.5	5.0
Jul-17	4.5	5.0
Aug-17	4.5	5.0
Sep-17	4.5	5.1
Oct-17	4.6	5.1
Nov-17	4.6	5.1
Dec-17	4.6	5.1
Jan-18	4.7	5.2
Feb-18	4.7	5.2
LIMIT	2.9	2.9

- 19. Based on information submitted to EPA by Arbor Hills Energy in response to Section 114(a) Information Requests, EUTURBINE 1-S3 and EUTRUBINE 3-S3 have continued to operate out of compliance with the applicable hourly sulfur dioxide emission limit since July 2016.
- 20. Table 2, below, shows the annual, 12-month rolling average, sulfur dioxide mass emissions reported by Arbor Hills Energy, in tons per year, for these turbines for the period July 2016 through February 2018.

Table 2: 12-Month Rolling Average Sulfur Dioxide Emissions for Turbines

Month	EUTURBINE 1-S3 Mass Emissions (tons per year)	EUTURBINE 3-S3 Mass Emissions (tons per year)
Jul-16	16.1	18.1
Aug-16	15.9	17.8
Sep-16	15.7	17.5
Oct-16	15.0	17.1
Nov-16	15.3	17.6
Dec-16	16.3	17.6
Jan-17	18.7	20.4
Feb-17	18.5	20.2
Mar-17	18.4	19.9
Apr-17	18.1	19.8
May-17	18.1	19.7
Jun-17	18.1	19.5
Jul-17	17.8	19.4
Aug-17	17.8	19.7
Sep-17	17.6	20.0
Oct-17	18.3	20.7
Nov-17	18.5	21.2
Dec-17	18.7	21.3
Jan-18	18.6	21.4
Feb-18	18.7	21.7
LIMIT	12.5	12.5

- 21. Based on information submitted to EPA by Arbor Hills Energy in response to Section 114(a) Information Requests, EUTURBINE 1-S3 and EUTURBINE 3-S3 continued to operate out of compliance with the applicable annual sulfur dioxide emission limit since July 2016.
- 22. The ROP sets hourly and annual sulfur dioxide emission limits for the three EGT duct burners as follows:
  - c. hourly limit of 0.3 lbs/hr; and
  - d. annual limit of 1.5 tpy, based on a rolling, 12-month average.
- 23. Table 3, below, shows the hourly average sulfur dioxide mass emissions reported by Arbor Hills Energy, in pounds per hour, for each of these duct burners for the period July 2016 to February 2018.

Table 3: Hourly Average Sulfur Dioxide Emissions for Duct Burners

Month	EUDUCTBURNER 1-S3 Mass Emissions (lb/hr)	EUDUCTBURNER 2-S3 Mass Emissions (lb/hr)	EUDUCTBURNER 3-S3 Mass Emissions (lb/hr)
Jul-16	0.6	0.4	0.9
Aug-16	0.7	0.4	0.9
Sep-16	0.7	0.4	0.8
Oct-16	0.8	0.4	0.9
Nov-16	0.8	0.4	0.9
Dec-16	0.8	0.4	0.9
Jan-17	1.2	0.4	0.2
Feb-17	1.3	0.6	0.2
Mar-17	1.3	0.7	0.2
Apr-17	1.3	0.8	0.2
May-17	1.3	1.0	0.2
Jun-17	1.3	1.1	0.2
Jul-17	1.3	1.2	0.2
Aug-17	1.3	1.2	0.2
Sep-17	1.3	1.3	0.2
Oct-17	1.3	1.4	0.2
Nov-17	1.2	1.4	0.2
Dec-17	1.3	1.6	0.2
Jan-18	1.3	0.5	0.2
Feb-18	1.2	0.5	0.2
LIMIT	0.3	0.3	0.3

- 24. Based on information submitted to EPA by Arbor Hills Energy in response to Section 114(a) Information Requests, EUDUCTBURNER 1-S3 and EUDUCTBURNER 2-S3 continued to operate out of compliance with the applicable hourly sulfur dioxide emission limit since July 2016, and EUDUCTBURNER 3-S3 continued to operate out of compliance with the applicable hourly sulfur dioxide emission limit since July 2016 until December 2016.
- 25. Table 4, below, shows the annual, 12-month rolling average, sulfur dioxide mass emissions reported by Arbor Hills Energy, in tons per year, for these duct burners for the period July 2016 to February 2018.

Table 4: 12-Month Rolling Sulfur Dioxide Emissions for Duct Burners

Month	EUDUCTBURNER 1-S3 Mass Emissions (tons	EUDUCTBURNER 2-S3 Mass Emissions (tons per	EUDUCTBURNER 3-S3 Mass Emissions (tons per
	per year)	year)	year)
Jul-16	2.3	1.2	2.7
Aug-16	2.3	1.2	2.8
Sep-16	2.5	1.3	2.9
Oct-16	2.6	1.3	2.9
Nov-16	2.6	1.3	3.1
Dec-16	2.8	1.3	3.0
Jan-17	4.8	2.0	0.7
Feb-17	4.7	2.6	0.7
Mar-17	4.9	3.0	0.7
Apr-17	4.9	3.6	0.7
May-17	4.9	4.3	0.8
Jun-17	4.8	4.6	0.7
Jul-17	4.9	4.7	0.8
Aug-17	5.1	4.8	0.7
Sep-17	4.9	4.9	0.7
Oct-17	4.6	4.8	0.7
Nov-17	4.2	4.8	0.6
Dec-17	3.8	4.6	0.6
Jan-18	3.3	1.4	0.5
Feb-18	3.0	1.3	0.4
LIMIT	1.5	1.5	1.5

- 26. Based on information submitted to EPA by Arbor Hills Energy in response to Section 114(a) Information Requests, EUDUCTBURNER 1-S3 continued to operate out of compliance with the applicable annual sulfur dioxide emission limit since July 2016, EUDUCTBURNER 2-S3 was out of compliance with the applicable annual sulfur dioxide emission limit from January 2017 to December 2017, and EUDUCTBURNER 3-S3 continued to operate out of compliance with the applicable annual sulfur dioxide emission limit since July 2016 until December 2016.
- 27. By failing to comply with hourly and annual sulfur dioxide emission limits for EUTURBINE 1-S3 and EUTURBINE 3-S3, Arbor Hills Energy is in violation of the FGTURBINES-S3 Emission Limits in Section 3 of the ROP.
- 28. By failing to comply with hourly and annual sulfur dioxide emission limits for EUDUCTBURNER 1-S3, EUDUCTBURNER 2-S3, and EUDUCTBURNER 3-S3, Arbor Hills Energy is in violation of FGDUCTBURNERS-S3 Emission Limits in Section 3 of the ROP.

## **Environmental Impact of Violations**

29. Current scientific evidence links short-term exposure to SO<sub>2</sub> ranging from 5 minutes to 24 hours with an array of adverse respiratory effects including bronchoconstriction and increased asthma symptoms.

Date

Edward Nam

Director

Air and Radiation Division

Standard bcc's:

Official File Copy w/Attachment(s)

Originating Organization Reading File w/Attachment(s)

Other bcc's:

Andre Daugavietis, C-14J (e-copy) Kenneth Ruffatto, AE-18J (e-copy)

Vicky Mei, AE-18J (e-copy)

#### CERTIFICATE OF MAILING

I certify that I sent a Finding of Violation, No. EPA-5-18-MI-06, by Certified Mail, Return Receipt Requested, to:

Anthony Falbo Fortistar Methane Group 5087 Junction Road Lockport, New York 14094

I also certify that I sent copies of the Finding of Violation by E-mail to:

Malcolm Mead-O'Brien Enforcement Unit Supervisor, Acting Air Quality Division, MDEQ meadm1@michigan.gov

and

Scott Miller District Supervisor, MDEQ millers@michigan.gov

2018.

Kathy Jones, Program Technician

AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER:

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